Lase Number

Application Transcripts.

Small Exhibits

F/C

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico July 1, 1970

EXAMINER HEARING

IN THE MATTER OF:

Application of Champlin Petroleum Company for a unit agreement, Roosevelt County, New Mexico.

Application of Champlin Petroleum Company for a waterflood expansion and amendment of Order No. R-3550, Roosevelt County, New Mexico.

Cases 4377

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. KELLAHIN: I am Jason Kellahin, Kellahin and Fox, Santa Fe, appearing for the applicant.

We would like to move that case 4377 and 4378 which relates to a waterflood of the same tract involved in 4377, we'd like to move that they be consolidated for the purposes of testimony.

MR. UTZ: Cases 4377 and 78 will be consolidated for the purposes of testimony.

MR. KELLAHIN: We'd like one witness sworn, please.

WALTER SANER,

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

- Q You are Walter Saner. What is your position, Mr. Saner -- by whom are you employed?
- A I'm employed by Champlin Petroleum Company. I am a staff engineer specializing in secondary covering waterflooding.
 - Q Where are you located?
 - A Fort Worth, Texas.
- Q In connection with your work as staff engineer do you have anything to do with the proposed Chaveroo-San Andres Pool waterflood project?
 - A Yes, sir.

- Q And agreement?
- A Yes, sir.
- Q Have you ever testified before the Oil Conservation Commission?
 - A No.
- Q For the benefit of the examiner would you briefly outline your educational experience?
- A I graduated in 1950 from the University of Oklahoma,

 Petroleum Engineering degree, Bachelor of Science and I went
 to work for Champlin Petroleum Company, that is predecessor, in

 1951. I have been with the same company since.
 - Q What have you done since this period of time?
- A I was in general engineering until the year 1957, which would be drilling, production, everything, and I have specialized in secondary recovery waterflooding since 1957.
- Q And what area have you been working in during that period of time?
- A I have worked all the central states; Texas, Oklahoma, Rocky Mountains -- not particularly New Mexico except for Cheveroo.
- MR. KELLAHIN: Are the witnesses qualifications acceptable?

MR. UTZ: Yes. They are.

(Whereupon, Applicant's Exhibit 1 was marked for identification)

- Q (By Mr. Kellahin) Mr. Saner, referring to what has been marked as the applicant's Exhibit No. 1 in this case, would you identify that exhibit, please?
- A Exhibit 1 is the unit agreement for the development and operation of the State 32-7-33 unit area, Roosevelt County, New Mexico.
 - Q Now, what land is covered by this unit agreement?
- A This covers all of Section 32, Township 7 South,
 Range 33 East, Roosevelt County.
 - Q Is that state, federal or fee acreage?
 - A It is all state acreage.
- Q Do you know who the beneficial institution is -- is it common-school land?
 - A It is common-school land.
 - Q Who are the working-interest owners?
- A The working-interest owners under the whole tract is each is fifty-fifty, Champlin Petroleum and Warren American Petroleum Company.
- Q Have they both agreed to the provisions of this unit agreement?
 - A Yes.
 - Q What is the participation factor under the unit

agreement?

- A The participation factor is based on the oil production last six months of 1969.
 - Q The tract if fully developed, is that correct?
- A Well, no. There are three locations that have not been drilled.
- Q Now, on the overriding royalities, have the owners agreed to this agreement?
- A Well, we expect to -- we have submitted the form and ratifications to them and anticipate approval on the overriding royalties.
- Q They are listed in the exhibit attached to the agreement, are they not?
 - A Yes.
- Q Now, has this unit agreement been submitted to the Commission of Public Lands for approval?
 - A Yes.
 - Q And have you received preliminary approval of it?
- A We have received preliminary approval as to form and content.
- Q Subject to the approval of this Commission of the final approval, is that correct?
 - A That is correct.
 - Q There is a provision in the unit agreement for

expansion and subsequent joinder?

- A Yes.
- Q And is it a form of unit agreement that has heretofor been approved by this Commission?
 - A Yes.
- Q Formally recommended by the State Land Commissioner, is that correct?
 - A Yes.
- Q Now, Mr. Saner, do you have a waterflood project presently under way on the lands that are affected by this units agreement -- well, prior to getting to that, is there an exhibit marked as Exhibit 1?
- A Exhibit 1 is the outstanding operating agreement between Warren American and Champlin Petroleum Company which will cover the operating portions of the unit.
- Q And is that in a standard form that has been used before in other cases?
- A I am not sure if it is standard for the State Land, but it covers our operations under this and other acreage in the area. It was not made specially for this unit. It was existing prior to this unit.
- Q You have used the same form in other operations in this area, is that correct?
 - A Yes, sir.

- Q Now, is this area subject to a waterflood project at the present time?
 - A Yes. It is.
- Q Do you know the number of the order approving that project -- I believe it is R-3550, is that correct?
 - A I believe that is correct, yes -- 3550.
- Q And in your application for waterflood expansion, your expanding that flood, it was a pilot flood?
 - A It was a pilot flood, yes.

(Whereupon, Applicant's Exhibit 2 was marked for identification)

- Q Now, referring to what has been marked Exhibit 2, would you identify that exhibit?
- A Exhibit 2 is a large map showing the proposed units. It shows off-set wells around it; other property owners. It shows the present in-put well on the Section 32 unit. It shows two other in-put wells we have on the property to the north.

(Whereupon, Applicant's Exhibit 3 was marked for identification)

- Q Now, referring to what has been marked Exhibit No. 3, would you identify that exhibit?
- A Exhibit 3 is a map which shows only the proposed unit in Section 32-7 South, 33 East. It shows the wells. It shows the present in-put well which is State 32-7-33 Well No. 5. It shows the proposed in-put well which will be State 32-7-33

Well No. 1.

- Q Now, is that an existing well?
- A It is an existing, producing well.
- Q And that will be converted to injection, is that correct?
 - A Yes.
 - Q What is the location of that well?
- A That well is in the Northwest of the Northeast Section 32, Township 7 South, Range 33 East.

(Whereupon, Applicant's Exhibit 4 was marked for identification)

- Q Now, referring to what has been marked as Exhibit No. 4, would identify that exhibit, please?
- A Exhibit 4 consists of three pages. Each is a graph showing production performance on the three tracts which will be consolidated into this unit and they are called Hondo State, Shell State and State 32-7-33 leases and they show that these leases are essentially approaching depletion and shows the water performance versus time and also the one on State 32-7-33 shows a performance from the water injection and it also shows the date the water injection was started. It started in January of 1969.
- Q You say that well has shown some response to the injection program, has it?

- A There is one well on this lease that is reflected in this curve of the total lease.
 - Q Do you know which well that is that shows the response?
 - A Yes. It is No. 9.
 - Q Where would it be located?
- A No. 9 is located northwest diagonally from our present injection well No. 5.

(Whereupon, Applicant's Exhibit 5 was marked for identification)

- Q Now, referring to what has been marked Exhibit No. 5, would identify that exhibit, please?
- A Exhibit 5 is a tabulation of the individual well current rate data and this shows the oil rate for each well in the proposed unit; the water rate, barrels per day and gas rate, water per cent and gas-oil ratio.
- Q Does this indicate that this pool in this area is in an advanced stage of depletion?
 - A Yes, sir. It does.
- Q And does it indicate that there has been some response to the flooding, the pilot flood project?
 - A Yes, which can be seen in well No. 9.

(Whereupon, Applicant's Exhibit 6 was marked for identification)

Q Now, referring to what has been marked Exhibit No. 6,

would you identify that exhibit?

- A Exhibit No. 6 is a tabulation of the injection wells statisics, Well No. 5, and this shows the in-put rate, barrels per day, well head pressure, in-put for the month and cumulative water in-put figures.
- Q You have the cumulative injection to date, is that correct?
 - A Yes.
- Q What pressures do you find operate the best in this pool?
- A Well, from this tabulation you can observe that as the rates increase the pressure leveled off at approximately 800 pounds well head pressure and we think that indicates an operating fracture pressure at which we'd like to stay at or below.
- Q You don't anticipate exceeding that at least until you get fill up, is that correct?
- A Right. That is another on the long term. We expect that the fracture pressure will increase as the reservoir is pressured up and that it may, late in its life, go as high as 2000 pounds well head pressure.
 - Q Maximum pressure then you say 2000 pounds maximum?
- A Yes. 2000 pounds. We'd like to have permission to go that high.
 - Q What rate of injection would you use on these

injection wells in the future?

- A Up to a maximum of 1200 barrels of water per day.
- Q That would be for each injection well?
- A Per well.
- Q Now, in your application you ask for approval, an administrative procedure for approving other injection wells. Would that figure apply to them too?

A Yes.

(Whereupon, Applicant's Exhibit 7 marked for identification)

- Q Referring to what has been marked as Exhibit No. 7, would identify that exhibit, please?
- A Exhibit 7 is a diagrammatic sketch of our proposed well completion for State 32-7-33 Well No. 1. It shows the casing, tubing, cement top perforations.
 - Q That is the existing completion, is it not?
- A Essentially, except we have put a proposed packer in and tubing seating which might vary a small amount, but we would put a packer in the well.
 - Q It would be essentially at that depth?
 - A At that depth, right.
- Q Otherwise the completion is as shown and is presently existing, is that correct?
 - A Yes.

- Q The cementing is shown?
- A The cementing, the casing, the perforations and everything else would remain the same.
 - Q Would the casing to the annulus be treated with water?
 - A We'd fill it with treated water.
 - Q Would you put any pressure gases at the surface?
 - A Yes.
 - Q Will you use an internal-coated tubing?
- A No. We desire to use a tubing as it is and the reason for that is that the life of this project is extremely short and we'd like to -- the cost really doesn't justify in this instance.
- Q Did you get approval for the use of uncoated tubing in your pilot injection well?
- A Yes. On this lease as well as the two leases to the north in Section 29.
 - Q Have you had any problems with corrosion in those wells?
 - A No.
 - Q Are you using coupons for testing the water?
- A We have just started using coupons and intend to use them in the future at the in-put wells. We have used coupons on production wells and have been analyzing the produced water system.
 - Q You are injecting produced water in here, are you not?

- A Yes.
- Q We will get to that in a moment. Are you treating the injected water?
 - A No.
 - Q Not at the present time?
 - A Not at the present time.

(Whereupon, Applicant's Exhibit 8 marked for identification)

- Q Now, referring to what has been marked as Exhibit No. 8, will you identify that exhibit?
- A Exhibit 8 is an electric log upon which has been marked the perforations and the top of San Andres Formation of the proposed in-put Well No. 1.

(Whereupon, Applicant's Exhibit 9 was marked for identification)

- Q Referring to what has been marked as Exhibit No. 9, would you identify that exhibit, please?
- A Exhibit No. 9 shows the gathering system in this portion of the field from the various leases wherein we gather all the produced water delivered to a central point in Section 32 and it is pressured and it shows the injection lines to the various injection wells both on this proposed unit and to the north. Section 29.
 - o ... ow, the source of your water then is produced water.

Is that from your own leases or other operator's too?

- A It is mainly our own leases, but there are minor amounts coming from other operator's leases.
 - Q And is this from the San Andres Formation?
 - A It is all from the San Andres Formation.
 - Q And you are reinjecting into it?
 - A Yes.
 - Q Is this being done elsewhere in this area?
- A Yes. It is. I know it is being done under the operation as a disposal operation, taking produced water, putting it back in the San Andres -- probably not to the extent, as large an extent as we have and I am not sure if it is being done on a waterflood basis or not.
 - Q Do you have a water analysis of the produced water?
 - A Yes. That is Exhibit 10.

(Whereupon, Applicant's Exhibit 10 was marked for identification)

- Q Have you made a recheck on the water analysis --has there been a more recent analysis made?
 - A Yes. There has.
- Q Is it essentially the same as this one you are submitting now?
 - A Yes. It is.
 - Q As a matter of fact, Mr. Saner, the pilot injection

proposal has had only a very small response, isn't that correct?

- A Yes.
- Q But it has had a response?
- A Yes.
- Q Now, when Champlin originally filed this application which resulted in Order No. 3550, they applied for salt water disposal, did they not?
 - A Yes.
- Q But at the hearing it was developed that this would probably result in some additional recovery and the case was changed to secondary recovery, is that correct?
 - A Yes.
- Q And you feel today that it is essentially a secondary recovery project rather than salt water disposal?
 - A Yes.
 - Q Although in fact it serves both purposes?
- A Yes. It serves both purposes. You can look at it either way.
- Q Now, in the application, the applicant applies for an adminstrative procedure for the conversion of wells or the drilling of additional injection wells whether or not there has been a response to the flood. Do you feel that is essential to the efficient operation of this project?

- A Yes.
- Q Do you anticipate that other injection wells will be drilled or producing wells converted?
 - A Yes.
- Q At this time could you say which wells or where they might be located?
- A Not for sure. Our plan is to watch this flood and observe the existence of oriented fracturing for a trent and then be flexible enough to add wells in the proper locations as they prove themselves.
- Q Is that the reason then for your request for an administrative procedure?
 - A Yes.
- Q Were Exhibits 1 to 10 inclusive prepared by you or under your supervision?
 - A Yes.
- MR. KELLAHIN: At this time I'd like to offer Exhibits 1 through 10.
- MR. UTZ: Without objection, Exhibits 1 through 10 will be entered into the record in this case.

(Whereupon, Applicant's Exhibits 1-10 were entered into the case)

MR. KELLAHIN: That completes the direct examination, Mr. Utz.

CROSS EXAMINATION

BY MR. UTZ:

- Q Mr. Saner, how long have you been injecting water in the wells with uncoated tubing?
 - A Since January of 1969.
- Q And have you had occasion to check that tubing to see whether there was any corrosion or not?
- A Not the tubing, but we have a pressure gauge on the annulus and we have had no problem there. We checked the well head filter. If it was corrosive it would show in the flanges and -- unions is the word -- and there has been no corrosion on the surface connections. We have had no leaks.
 - Q You are not using anything to check it?
- A We have, on the production system, the same water arriving to the plant, but we haven't had it on the down stream side.
- Q What has been your result with the coupons on the production?
- A Those coupons show from 0-1 to 0-4 which is very, very minor corrosion and there has been no evidence of corrosion on any of the production equipment.
- Q This is pretty salty water. I was wondering about that.
 - A Yes. Our experience is that the saltiness doesn't

mean it is necessarily corrosive. It is the other chemicals.

- Q It is a closed system, too, is it not?
- A Yes.

MR. UTZ: I have no other questions of the witness. You may be excused.

Statements?

MR. KELLAHIN: That is all, sir.

CROSS EXAMINATION

BY MR. HATCH:

- Q Are these tank batteries on here?
- A Yes. Those circles are tank batteries. Let me change something. We do have coupons. About two months ago we put coupons in the in-put wells but they haven't been analyzed so we intend to keep them in there and we have started it but we don't have an analysis.

MR. UTZ: Any statements to be made?

The case will be taken under advisement.

INDEX

WITNESS	PAGE
WALTER SANER	
Direct Examination by Mr. Kellahin	2 2
Cross Examination by Mr. Utz	17
Cross Examination by Mr. Match	18
EXHIBIT MARKED	OFFERED AND ADMITTED
Applicant's 1 4	
Applicant's 2 & 3 7	en e
Applicant's 4	
Applicant's 5 & 6 9	
Applicant's 7	16
Applicant's 8 & 9 13	
Applicantia 10	

STATE OF NEW MEXICO)

COUNTY OF BERNALILLO)

I, Peter A. Lumia, Certified Shorthand Reporter in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Actual Lumin Certified Shorthand Reporter

Her English Oil Conservation Correlation



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO P. O. BOX 2088 - SANTA FE 67801 GOVERNOR DAVID F. CARGO CHAIRMAN

LAND COMMISSIONER ALEX J. ARMIJO MEMBER

STATE GEOLOGIST A. L. PORTER, JR. SECRETARY - DIRECTOR

July 10, 1970

Mr. Jason Kellahin Kellahin & Fox Attorneys at Law Post Office Box 1769 Santa Fe, New Mexico Re: Case No. 4378
Order No. R-3550-A
Applicant:
Champlin Petroleum Company

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

ALP/ir			
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Other	State Engineer Office		

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE NATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE No. 4378 Order No. R-3550-A

APPLICATION OF CHAMPLIN PETROLEUM COMPANY FOR A WATERFLOOD EXPANSION AND AMENDMENT OF ORDER NO. R-3550, ROOSEVELT COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 1, 1970, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 10th day of July, 1970, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises.

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That by Order No. R-3550, dated Movember 4, 1968, the Commission authorized Champlin Petroleum Company to institute the Champlin Chaveroo Lauck Waterflood Project and the Champlin Chaveroo State 32 Waterflood Project in the Chaveroo-San Andres Pool, Roosevelt County, New Mexico.
- (3) That the applicant now seeks authority to expand its Champlin Chaverco State 32 Waterflood Project by the conversion to water injection its State 32-7-33 Well No. 1, located in Unit B of Section 32, Township 7 South, Range 33 East, NMPM, Roosevelt County, New Mexico.

-2-CASE No. 4378 Order No. R-3550-A

- (4) That the wells in the Champlin Chaveroo State 32 Water-flood Project area are in an advanced state of depletion and should properly be classified as "stripper" wells.
- (5) That the proposed expansion of the Champlin Chaveroo State 32 Waterflood Project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.
- (6) That the proposed expansion of the Champlin Chaveroo State 32 Waterflood Project should be approved.
- (7) That the applicant further seeks amendment of said Order No. R-3550 to provide an administrative procedure whereby the Secretary-Director of the Commission may approve the drilling or conversion of additional water injection wells without a showing of well response at standard locations within said Champlin Chaveroo State 32 Waterflood Project area as may be necessary to complete an efficient injection pattern.
- (8) That approval of the aforesaid amendment will afford the applicant the opportunity to produce its just and equitable share of the oil in the Chaveroo-San Andres Pool, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

- (1) That the applicant, Champlin Petroleum Company, is hereby authorized to expand its Champlin Chaveroo State 32 Waterflood Project in the Chaveroo-San Andres Pool by the injection of water into the San Andres formation through its State 32-7-33 Well Mo. 1, located in Unit B of Section 32, Township 7 South, Range 33 Bast, MMPM, Roosevelt County, New Mexico.
- (2) That monthly progress reports of the expanded Champlin Chaveroo State 32 Waterflood Project shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.
- (3) That Order (2) of Commission Order No. R-3550, dated November 4, 1968, is hereby amended to read in its entirety as follows:
- "(2) That the Champlin Chaveroo Lauck Waterflood Project and the Champlin Chaveroo State 32 Waterflood Project, as expanded,

-3-CASE No. 4378 Order No. R-3550-A

shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations;

PROVIDED HOWEVER, that the Secretary-Director of the Commission may approve the drilling or conversion of additional water injection wells at standard locations within said Champlin Chaveroo State 32 Waterflood Project area as may be necessary to complete an efficient injection pattern in said project; and provided further, that the application therefor has been filed in accordance with Rule 701 B of the Commission Rules and Regulations, and provided further, that a copy of the application has been sent to all offset operators, if any there be, and no such operator to all offset operators, if any there be, and no such operator has objected within 15 days. The showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF MEN MEXICO OLL COMBENIATION COMMISSION

DAVID T. CARGO, Chairman

ALEX J. ARMIJO, Member

A. L. PORTER, Jr. Member & Secretary

4378 Keard 7-1->0 Rec 7-8-70 Grant Champslin an amendment to R-3550- the grant and additional injection wells for the flood-the their lf. 32-7-33 en administration provision so thefterdayed in wells com be opposed administrationely.

DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 1, 1970

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM, STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Elvis A. Utz, Examiner, or Daniel S. Nutter, Alternate Examiner:

CASE 4354: (Continued from the May 13, 1970, Examiner Hearing)

Application of Michael P. Grace and Corinne Grace for compulsory pooling, Eddy County, New Mexico. Applicants, in the above-styled cause, seek an order pooling all mineral interests from the surface of the ground down to and including the Morrow formation underlying the N/2 of Section 11, Township 23 South, Range 26 East, South Carlsbad: Field, Eddy County, New Mexico, said acreage to be dedicated to a well to be drilled in either the NE/4 NW/4 or the NW/4 NE/4 of said Section 11. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

CASE 4165: (Reopened):

In the matter of Case No. 4165 being reopened pursuant to the provisions of Order No. R-3795, which order established 160-acre spacing units and an 80-acre proportional factor of 4.77 for the East Bagley-Pennsylvanian Pool, Lea County, New Mexico. All interested parties may appear and show cause why the said pool should not be developed on less than 160-acre apacing units and to show cause why the 80-acre proportional factor of 4.77 should or should not be retained.

CASE 4173: (Reopened):

In the matter of Case No. 4173 being reopened pursuant to the provisions of Order No. R÷3811, which order established 80-acre spacing units and a limiting gas-oil ratio of 4000 cubic feet of gas per barrel of oil for the Hobbs-Drinkard Pool, Lea County, New Mexico. All interested parties may appear and show cause why the said pool should not be developed on 40-acre spacing units and why the limiting gas-oil ratio should not revert to 2000 to one.

- CASE 4371: Application of Betty Oil Company for a waterflood expansion and amendment of Order No. R-2966, as amended, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its Justis-McKee Unit Waterflood Project, Justis-McKee Pool, by the conversion to water injection of four additional wells in Units B and H of Section 24, Township 25 South, Range 37 East, and Units D and M of Section 19, Township 25 South, Range 38 East, Lea County, New Mexico. Applicant further seeks the amendment of Order No. R-2966, as amended, to permit administrative approval for the drilling or conversion of additional injection wells at orthodox or unorthodox locations without a showing of well response.
- CASE 4372: Application of International Hydrocarbons Incorporated for an unorthodox gas well location, Lea County, New Mexico.

 Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location for a well to be drilled 990 feet from the North and West lines of Section 8, Township 26 South, Range 33 East, Red Hills-Wolfcamp Gas Pool, Lea County, New Mexico.
- CASE 4373: Application of Benson-Montin-Greer Drilling Corporation for pool redelineation, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks the redelineation of certain pool boundaries to include the deletion of the following-described acreage from the East Puerto Chiquito-Mancos Oil Pool, Rio Arriba County, New Mexico.

TOWNSHIP 26 NORTH, RANGE 1 EAST Section 20: W/2 Section 29: All Section 32: All

Section 32: All Section 33: W/2

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TOWNSHIP 25 NORTH, RANGE 1 EAST

Section 4: W/2 Section 5: All Section 8: All Section 9: W/2 Section 17: All Section 20: Alli

Section 29: W/2

and for the extension of the West Puerto Chiquito-Mancos Oil Pool to include the above-described acreage and the following-described acreage in said county:

(Case 4373 continued)

TOWNSHIP 24 NORTH, RANGE 1 WEST Sections 1 through 36 - All

TOWNSHIP 24 NORTH, RANGE 1 EAST

Section 6: All Section 7: All Section 8: W/2 Section 17: W/2 Section 18: All Section 19: All Section 20: W/2

Section 30: All

CASE 4374: Application of Benson-Montin-Greer Drilling Corporation for expansion of a unit area, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand the Canada Ojitos Unit Area, authorized by Order No. R-2544, to include some 20,480 additional acres, more or less, of Federal, State and Fee lands in Township 24 North, Ranges 1 East and 1 West, Township 25 North, Ranges 1 East and 1 West; and Township 26 North, Range 1 East, Rio Arriba County, New Mexico.

CASE 4366: (Readvertised)

Application of Mobil Oil Corporation for down-hole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Vacuum-Wolfcamp and Vacuum-Upper Pennsylvanian Pools in the well-bore of its Bridges State Well No. 109, a triple completion, located in Unit N of Section 24, Township 17 South, Range 34 East, Lea County, New Mexico.

CASE 4375: Application of Pan American Petroleum Corporation for an exception to Rule 104 C. I, Lea County, New Mexico.

Applicant, in the above-styled cause, seeks an exception Rule 104 C. I of the Commission Rules and Regulations to permit the completion within 660 feet of another producing

CASE 4375 - Continued from Page 3 -

well of its Byers "A" Well No. 1 which is being directionally drilled in Unit C of Section 5, Township 19 South, Range 38 East, Hobbs Pool, Lea County, New Mexico, pursuant to Order No. R-3973.

CASE 4376:

Application of Pan American Petroleum Corporation for an exception to Order No. R-3221, as amended, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico. Said exception would be for applicant's Lusk "A" Lease comprising the NE/4 of Section 6, Township 15 South, Range 30 East, Double L-Queen Pool, Chaves County, New Mexico. Applicant seeks authority to dispose of salt water produced by wells on said lease in an unlined surface pit.

CASE 4377:

Application of Champlin Petroleum Company for a unit agreement, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks approval of the State 32-7-33 Unit Area comprising 640 acres, more or less, of State lands in Section 32, Township 7 South, Range 33 East, Chaveroo-San Andres Pool, Roosevelt County, New Mexico.

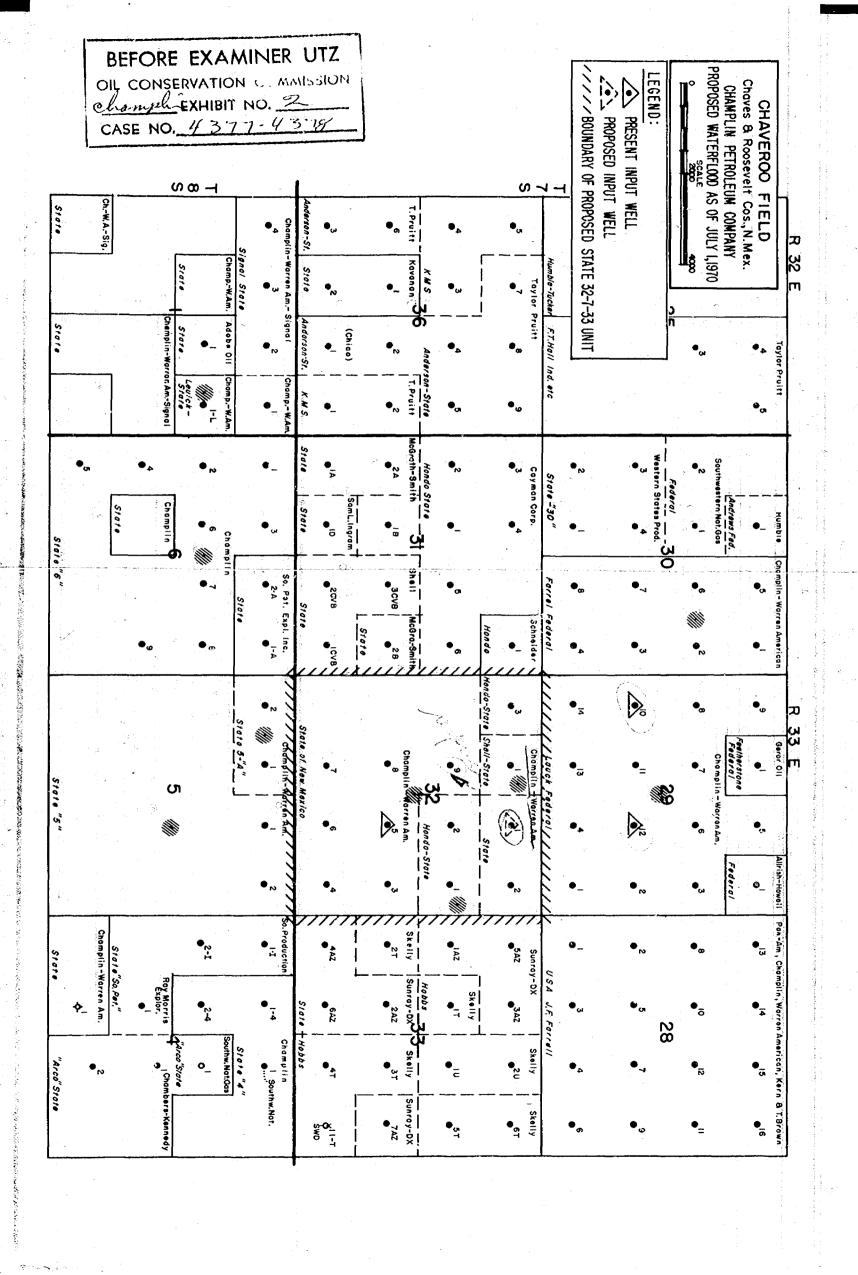
CASE 4378:

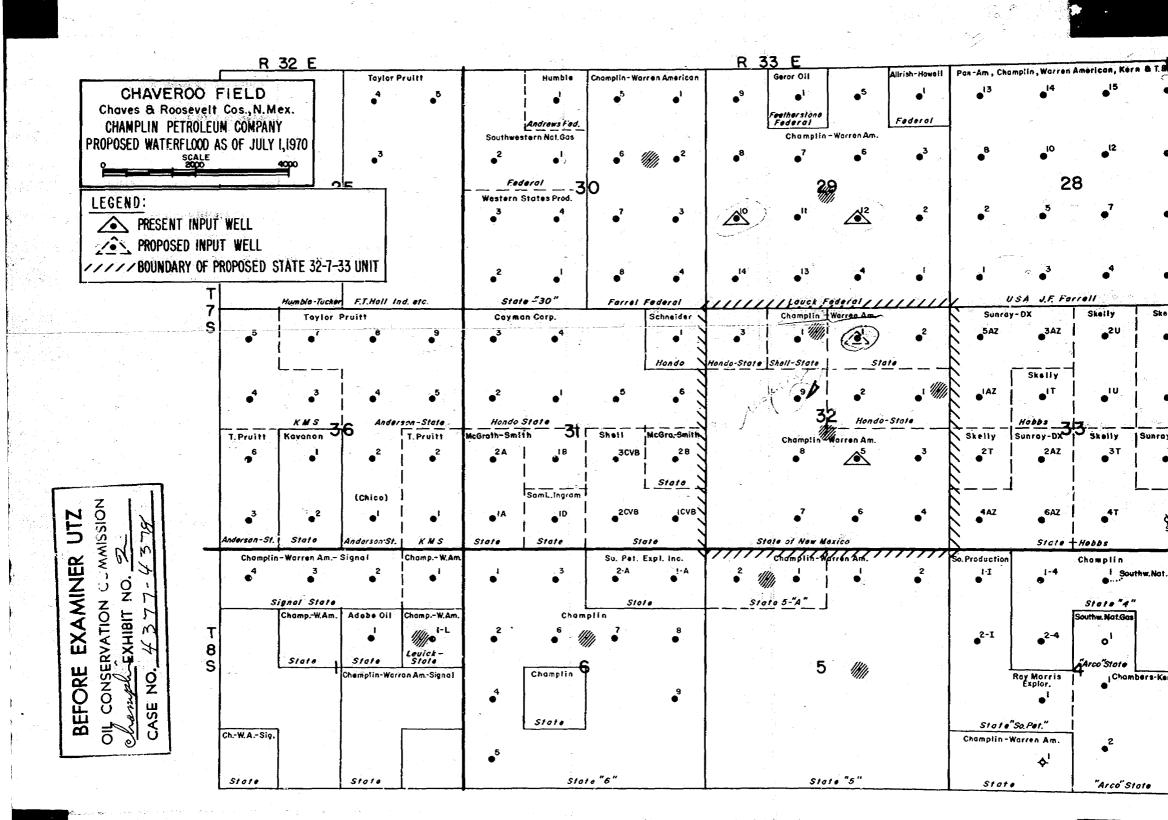
Application of Champlin Petroleum Company for a waterflood expansion and amendment of Order No. R-3550, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its State 32 Waterflood Project, Chaveroo-San Andres Pool, by the conversion of water injection of one additional well located in Unit 8 of Section 32, Township 7 South, Range 33 East, Roosevelt County, New Mexico. Applicant further seeks the amendment of Order No. R-3550 to permit administrative approval for the drilling or conversion of additional injection wells without a showing of well response.

Docket No. 16-70

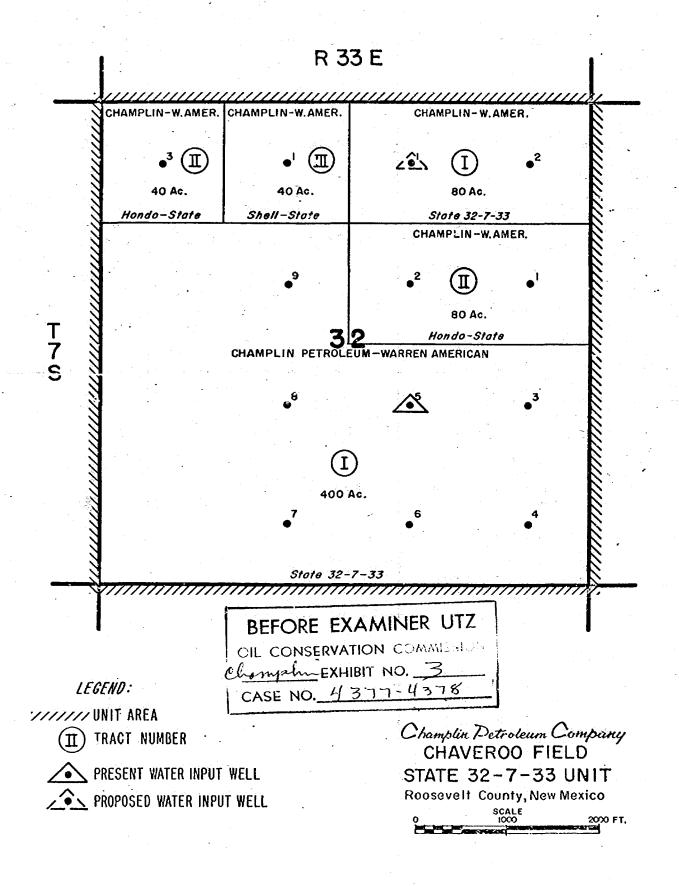
CASE 4379: Application of Hal M. Stierwalt for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, for himself and as agent for Southern Union Production Company, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico. Said exception would be for eight of Stierwalt's wells and four of Southern Union Production Company's wells located in Sections 1 and 2 of Township 16 South, Range 30 East, West Henshaw-Grayburg Pool, Eddy County, New Mexico. Applicant seeks authority to dispose of salt water produced by said wells in unlined surface pits located in the vicinity of said wells.

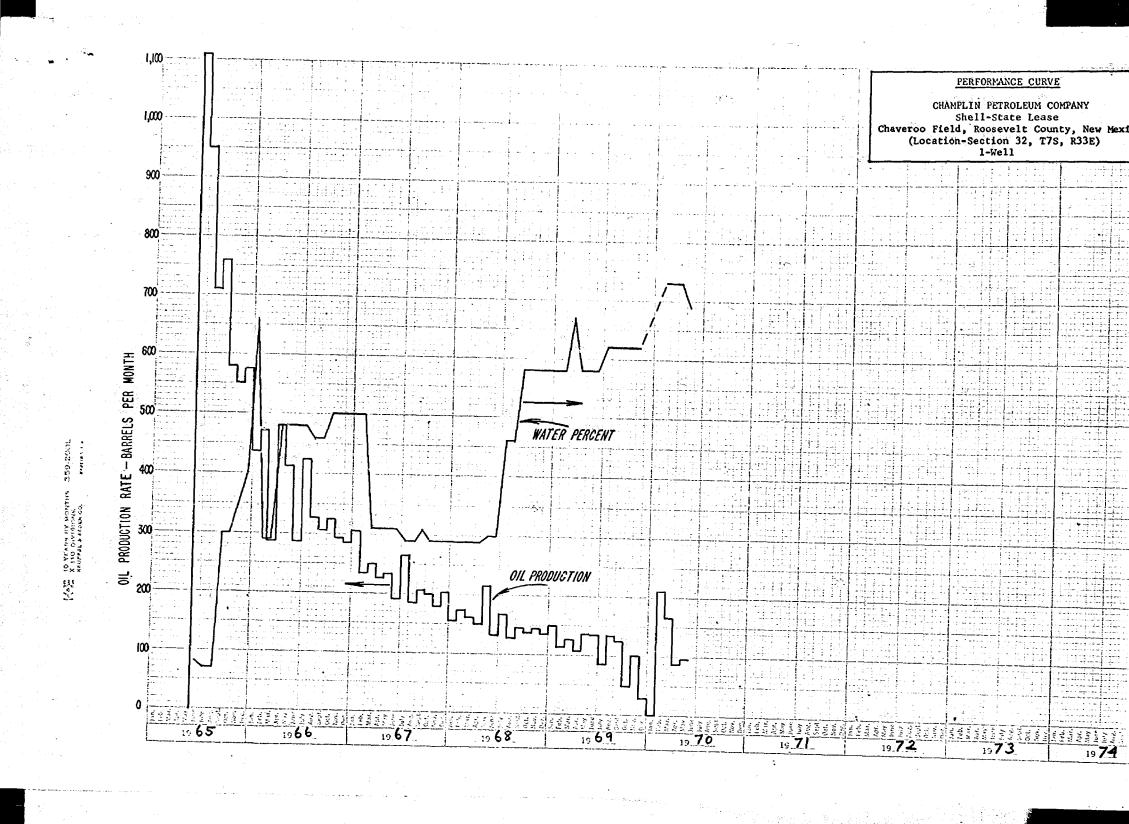
CASE 4380: Application of Shenandoah Oil Corporation for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Shugart Pool, Eddy County, New Mexico, by the injection of water into the Yates and Queen formations through its Shugart "B" Well No. 1 located in the SW/4 SE/4 of Section 33, Township 18 South, Range 31 East.

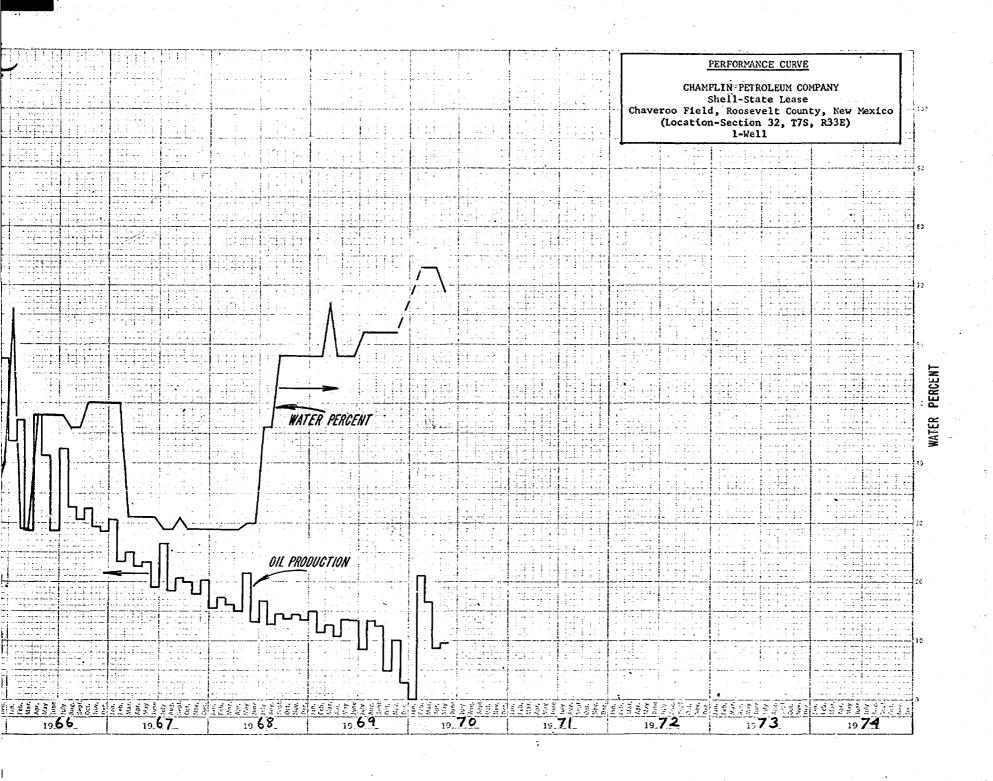


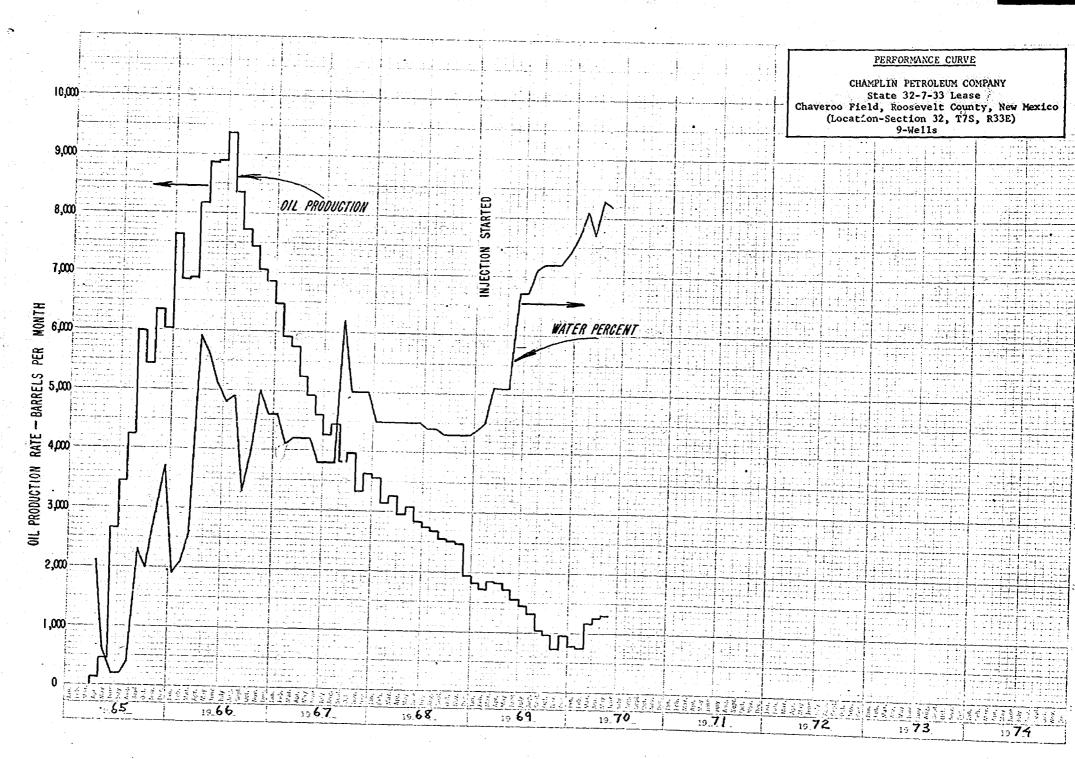


Taylor Pruitt Humble Champlin - Warren American Feetherstone Federal Andrews Fed. Southwestern Not.Gas Chemplin - Warran Am. Western States Prod. 3 28 TE 32-7-33 UNIT •¹⁴ ble-Tucker State -30" F.T.Hall Ind. etc. Skelly Teylor Pruitt Cayman Corp. Schneide Hondo indo-State Shell-State Skelly •6 5 T Hobbs Groth-Smith Shell McGra-Smith Sunray-DX Sunray-DX T. Pruitt Skelly Skelly . 7AZ <u>^</u>5 Stote Samt Ingram (Chico) •^{ID} ●2CVB •IA ŏ^{II-T} \$w⊅ State KMS State State Siale + Hobbs /// Chomblin-Warren Am. Champ.-W.Ar Forren Am.- Signal So, Pet. Expl. Inc. So. Production Champlin 3 2-A ıFă ● Southw.Not. .2 S1010 5-"A" State "4" State iomp,-W.Am. Southw.Nat.Gas Adobe Oil Chemp.-W.Am Champlin ////• I-L €^{2-I} Leuick -Stole 51010 5 Champlin Ray Morris Explor. Chemptin-Worron Am-Signat S1010"So.Pet." State Champlin-Warren Am. φľ Stole "5" State "6" "Arco" State State State



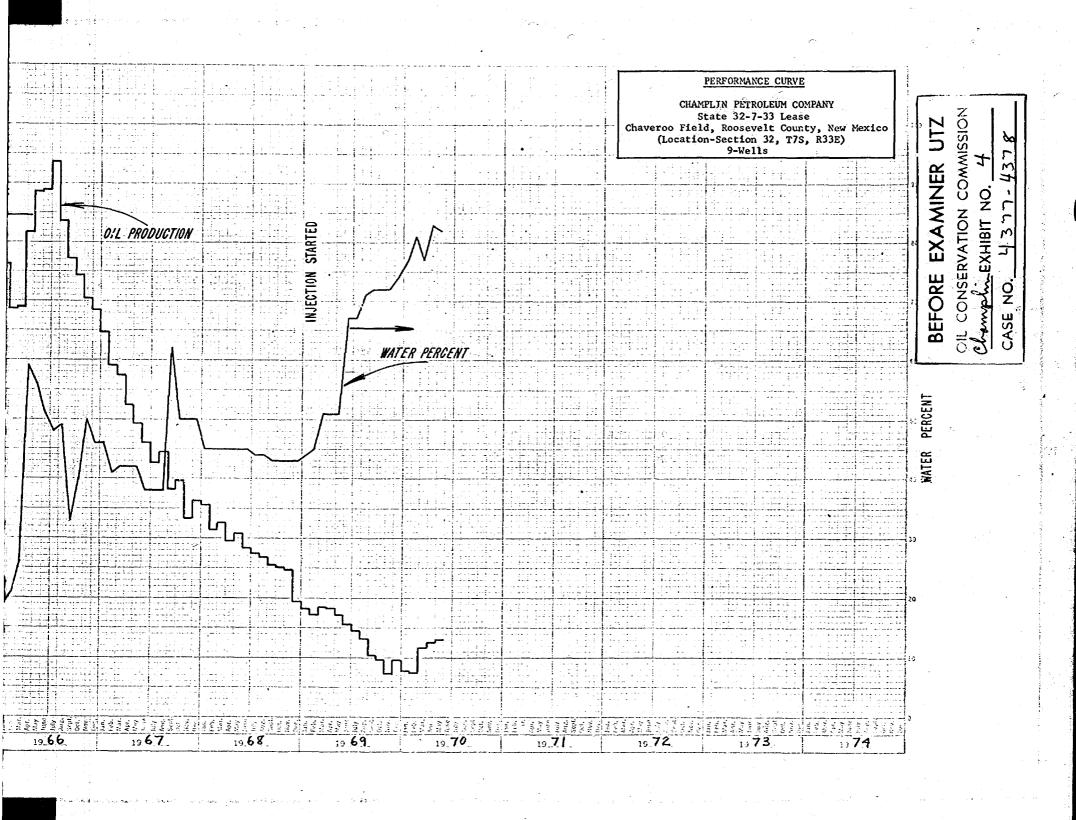


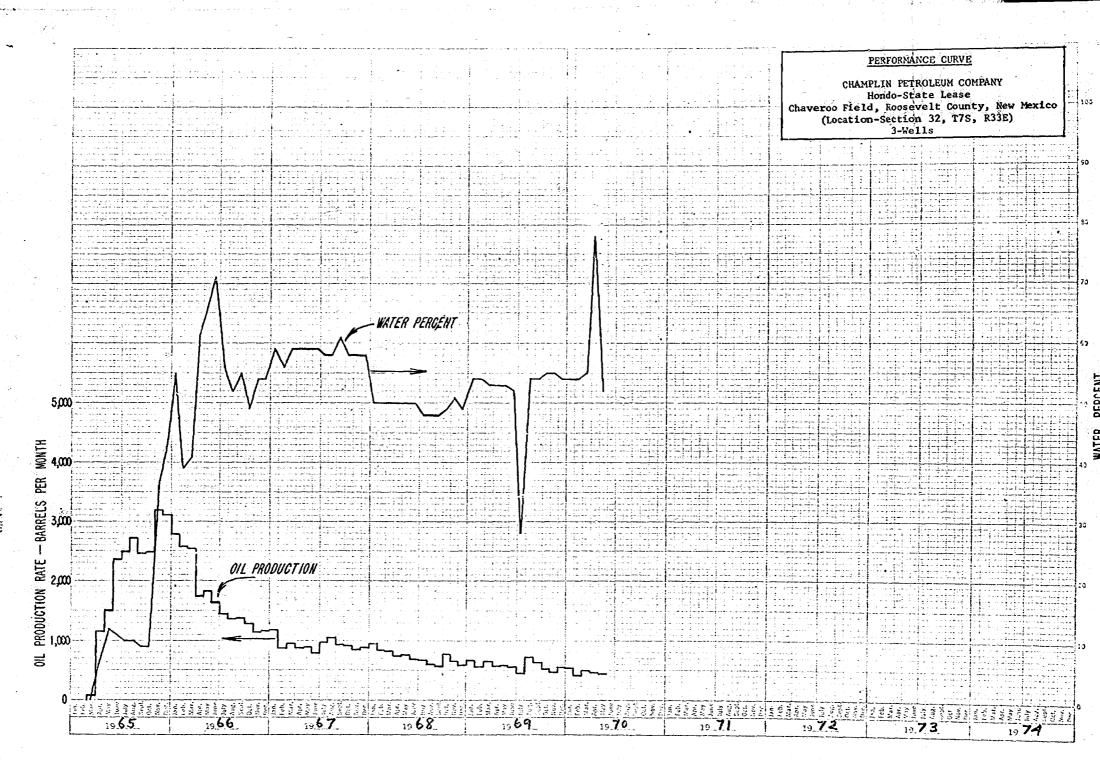




POST TO YEARS BY MONTHS 282-2000.

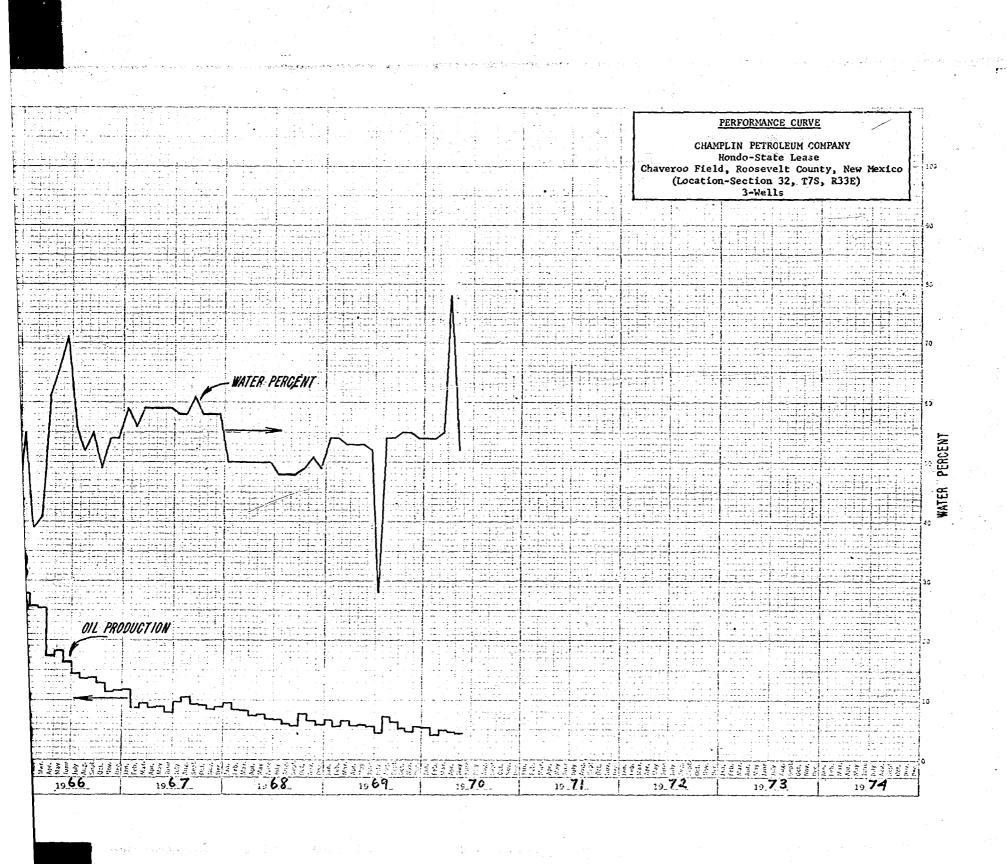
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CHAMPLIN PETROLEUM COMPANY

INDIVIDUAL WELL CURRENT RATE DATA-MAY 1970

PROPOSED STATE 32-7-33 UNIT CHAVEROO FIELD, ROOSEVELT COUNTY, NEW MEXICO (Section 32, T7S, R33E)

Lease & Well No.	The second secon		Oil Bbis/Day	Water Bbls/Day	Gas <u>Mcf/Day</u>	Water Percent	Gas-Oil Ratio Cu.Ft./Bbl.
State 32-7-33 Well	No.	1	3	3	5.6	50	1,900
State 32-7-33 Well	No.	2	g 1	18	3.4	95	3,533
State 32-7-33 Well	No.	3	3	6	3.0	67	1,033
State 32-7-33 Well	No.	4	7	31	5.9	82	868
State 32-7-33 Well	No.	5	WAT	ER INJ	ECTION	WELL	
State 32-7-33 Well	No.	6	4	4	7.8	50	2,000
State 32-7-33 Well	No.	7	8	. 7	6.8	48	876
State 32-7-33 Well	No.	8	6	22	4.8	79	818
State 32-7-33 Well	No.	9	11	97	10.0	90	928
Hondo-State No. 1			6	8	17.1	57	3,000
Hondo-State No. 2			5	. 4	10.0	45	2,014
Hondo-State No. 3		1. 	4	4	3.9	50	1,099
Shell-State No. 1			3	7	3.5	69	1,100

BEFORE EXAMINER UTZ

CIL CONSERVATION COMMISSION

CLASE NO. 4377.4378

CHAMPLIN PETROLEUM COMPANY

INJECTION WELL STATISTICS

State 32-7-33 Lease, Well No. 5 Chaveroo Field, Roosevelt County, New Mexico

Year & Month	Water Input Rate, Bbls/Day	Wellhead Pressure, Psig	Water Input for Month, Bbls.	Cumulative Water Input Since 1-1-69 Barrels
Jan. 1969	383	170	6,898	6,898
Feb.	301	320	8,430	15,328
Mar.	515	600	15,970	31,298
April	511	760	15,326	46,624
May	580	-800	17,954	64,578
June	620	760	18,595	83,173
July	617	840	19,121	102,294
Aug.	717	840	22,235	124,529
Sept.	72 5	890	21,739	146,268
Oct.	688	860	17,898	164,166
Nov.	605	520	18,139	182,305
Dec.	540	750	16,725	199,030
Total 1969			199,030	
*** 			en e	
Jan. 1970	654	780	20,272	219,302
Feb.	712	790	19,935	239,237
Mar.	751	800	23,279	262,516
April	657	860	19,724	282,240
May	812	800	25,192	307,432

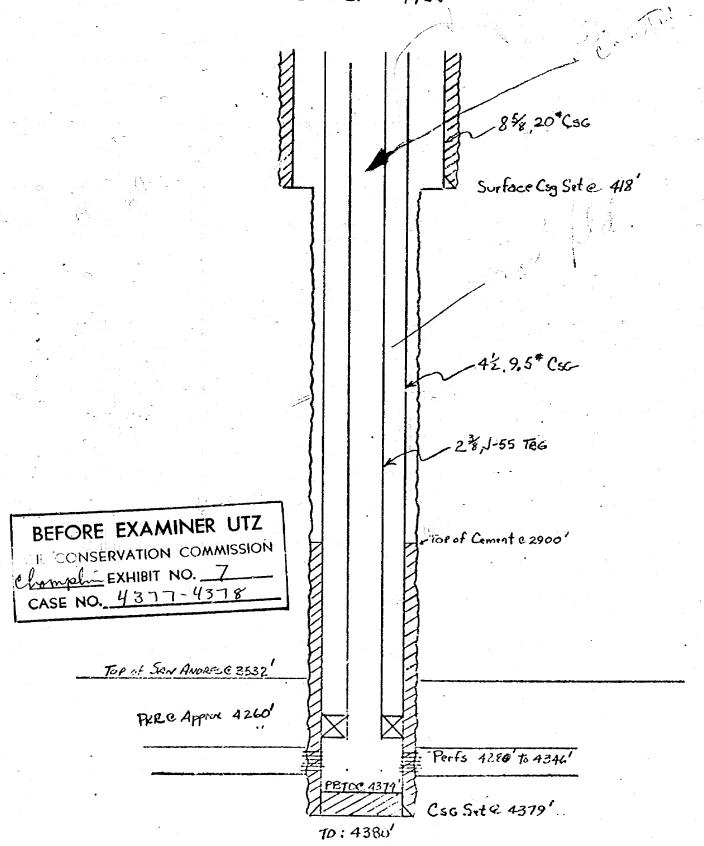
BEFORE EXAMINER UTZ

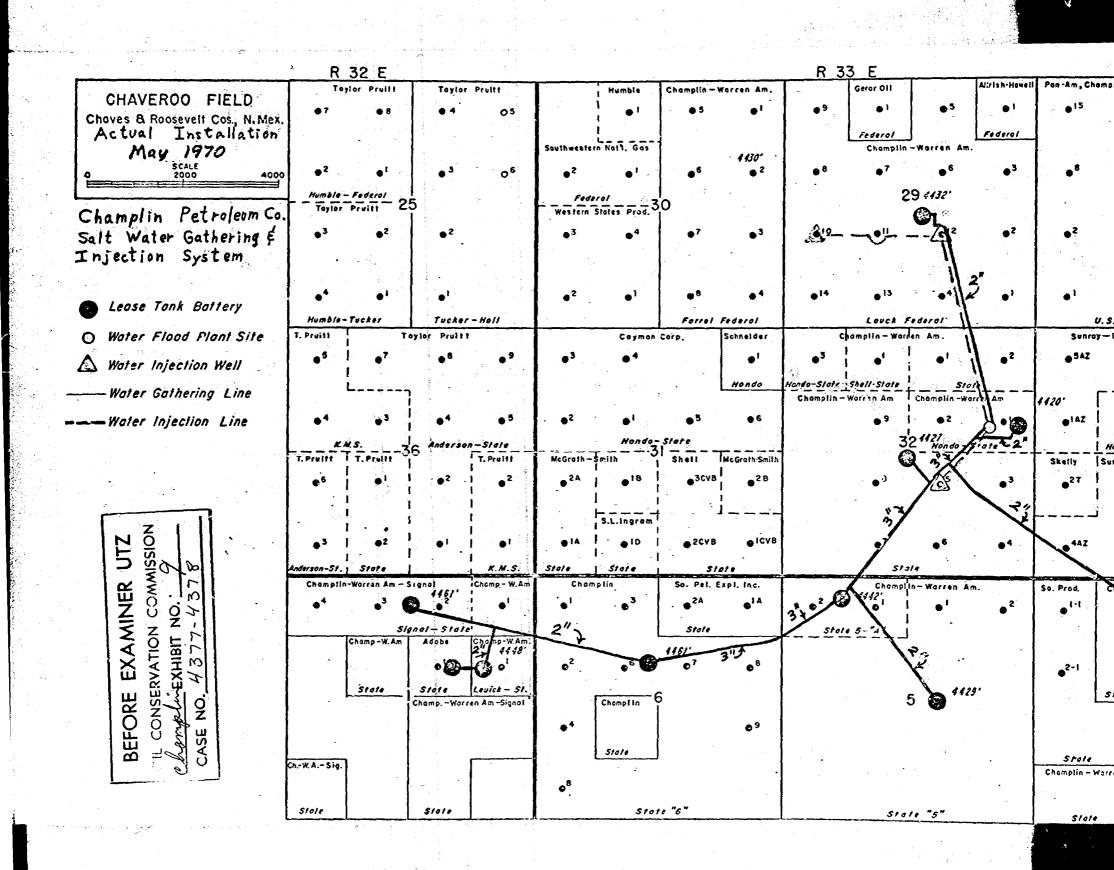
ChamphexHIBIT NO. 6

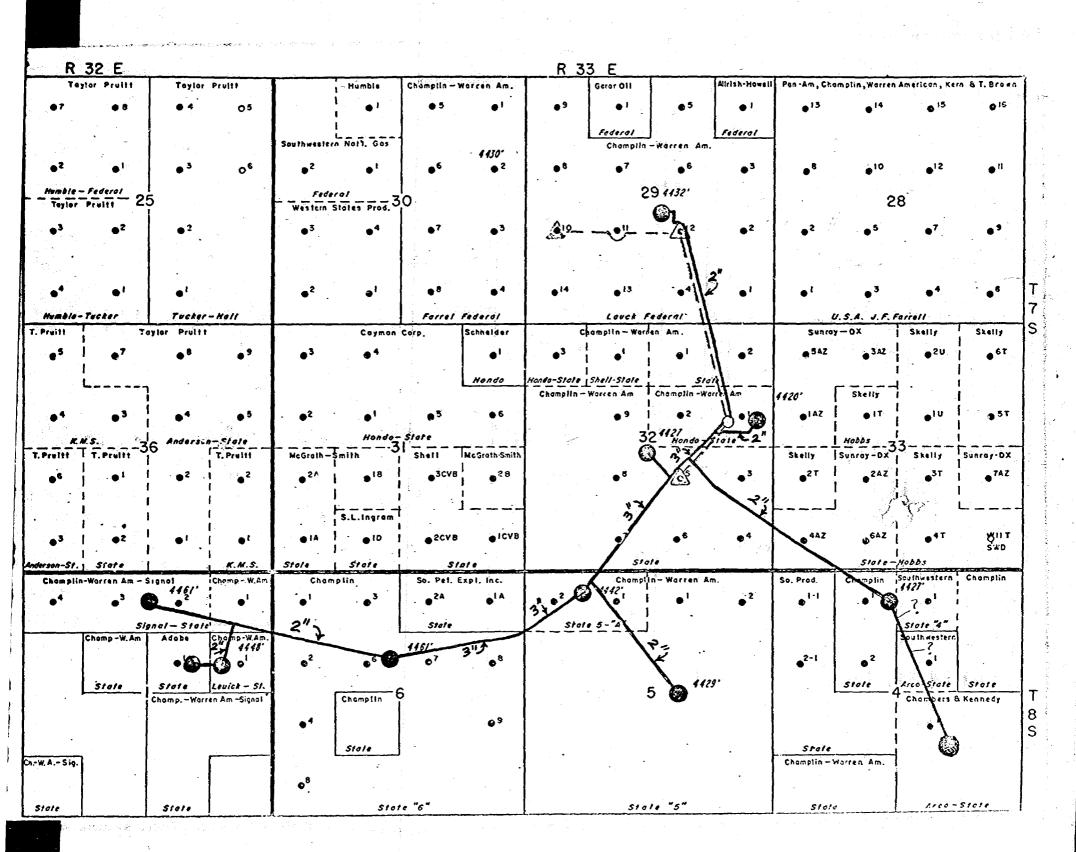
CASE NO. 4377-4378

STATE 32-7-33 WELL NO 1
ROCCEVELT CO, N.M.

DFELEY - 4438'







CHAVEROO FIELD

CHAVES & ROOSEVELT COUNTIES

NEW MEXICO

EXHIBIT A

FORMATION WATER ANALYSIS (SAN ANDRES) Milligrams per Liter

No	66,600
Na	
Ca	27,680
Mg	4,860
S04	200
C1	165,600
нсоз	nil
CO ₃	<u>nil</u>
Total Solids	264,940
Iron	None
Specific Gravity @ 60° F	1.174
Hydrogen Sulfide, H ₂ S	Present

BEFORE EXAMINER UTZ

Champha EXHIBIT NO. 10

CASE NO. 4377-4378

-21-

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JASON W. KELLAHIN RUBERT E. FOX

KELLAHIN AND FOX 54% EAST SAN FRANCISCO STREET POST/OFFICE BOX (769) ATTORNEYS AT LAW SANTA FE, NEW MEXICO 875

TELEPHONE 982-4315 AREA CODE 505

June 12, 1970

Car 4378

Oil Conservation Commission of New Mexico P.O. Box 2088 Santa Fe, New Mexico

Gentlemen:

Enclosed, in triplicate, are the applications of Champlin Petroleum Company for approval of a unit agreement, and for expansion of a waterflood project, in the Chaveroo-San Andres Pool, Roosevelt County, New Mexico.

It is our understanding that these cases will be set for hearing before the Commission's examiner on July 1, 1970.

Yours very truly,

oson w. Kellah Jason W. Kellahin

JWK/mc Enc.

DOCKET MAILED

BEFORE THE

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OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF CHAMPLIN PETROLEUM COMPANY FOR APPROVAL OF EXPANSION OF A WATERFLOOD PROJECT, ROOSEVELT COUNTY, NEW MEXICO June 4378

APPLICATION

Comes now Champlin Petroleum Company and applies to the Oil Conservation Commission of New Mexico for approval of a pilot waterflood project in the Chaveroo-San Andres Pool, Roosevelt County, New Mexico, and in support thereof would show the Commission:

- 1. Applicant is the operator of a pilot waterflood project heretofore approved by the Oil Conservation Commission of New Mexico by its Order No. R-3550, entered on November 4, 1964, which order, among other things, authorized the injection of water in the Champlin State 32-7-33 Well No. 5, located in Unit J of Section 32, Township 7 South, Range 33 East, N.M.P.M., Roosevelt County, New Mexico.
- 2. Applicant proposes to expand said waterflood project by adding as an injection well, its State 32-7-33 Well No. 1, located in Unit B of said Section 32.
- 3. Having already received a response to the injection of water into the No. 5 well, Applicant anticipates that it will be advisable, for the efficient operation of the waterflood project, to add additional injection wells, and drill additional producing wells from time to time, and therefore requests adoption of an administrative procedure whereby present producing wells may be converted to water injection, and additional injection wells may be drilled at standard locations for the purpose of establishing an efficient waterflood pattern, whether it is shown there has been a response to the water injection program, or not.

- 4. There is attached hereto a plat of said Section 32, showing the location of producing and injection wells.
- 5. Approval of this application is in the interests of conservation of oil and gas, will result in a greater recovery of oil that would not otherwise be recovered, and will protect the correlative rights of owners in the section and will not impair the correlative rights of others.

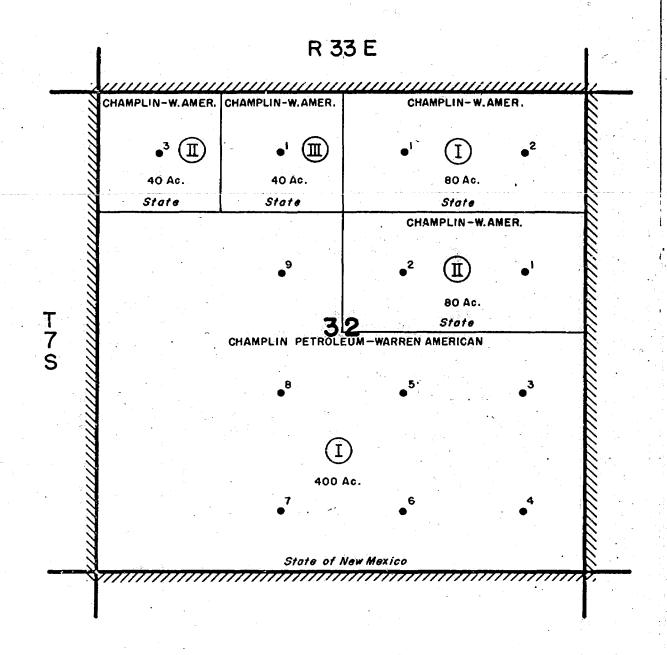
WHEREFORE Applicant prays that this matter be set for hearing before the Commission or the Commission's duly appointed examiner, and that after notice and hearing as required by law, the Commission enter its order granting the relief prayed for.

Respectfully submitted,
CHAMPLIN PETROLEUM COMPANY

KHLLAHIN & FOX

P.O. Box 1769 Santa Fe, New Mexico

Attorneys for Applicant



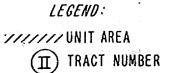


EXHIBIT A

Champlin Detroleum Company
CHAVEROO FIELD
STATE 32-7-33 UNIT
Roosevelt County, New Mexico

GMH/esr

SM

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CASE No. 4378

Order No. R-

APPLICATION OF CHAMPLIN PETROLEUM COMPANY FOR A WATERFLOOD EXPANSION AND AMENDMENT OF ORDER NO. R-3550, ROOSEVELT COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 1 , 1970, at Santa Fe, New Mexico, before Examiner Elvis A. Utz

NOW, on this <u>day of July</u>, 1970, the Commission, a quorum being resent, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That by Order No. R-3550, dated November 4, 1968, the Commission authorized Champlin Petroleum Company to institute the Champlin Chaveroo Lauck Waterflood Project and the Champlin Chaveroo State 32 Waterflood Project in the Chaveroo-San Andres Pool, Roosevelt County, New Mexico.
- (3) That the applicant now seeks authority to expand its Champlin Chaveroo State 32 Waterflood Project by the conversion to water injection of one additional well located in Unit B of Section 32, Township 7 South, Range 33 East, NMPM, Roosevelt County, New Mexico.

- (4) That the wells in the Champlin Chaveroo State 32 Water-flood Project area are in an advanced state of depletion and should properly be classified as "stripper" wells.
- (5) That the proposed expansion of the Champlin Chaveroo State 32 Waterflood Project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.
- (6) That the proposed expansion of the Champlin Chaveroo State 32 Waterflood Project should be approved.
- Order No. R-3550 to provide an administrative procedure whereby the Secretary-Director of the Commission may approve the drilling or conversion of additional water injection wells without a showing of well response within said Champlin Chaveroo Lauck and Champlin Chaveroo State 32 Waterflood Project areas as may be necessary to complete efficient injection patterns.
- (8) That approval of the aforesaid amendment will afford the applicant the opportunity to produce its just and equitable share of the oil in the Chaveroo-San Andres Pool, and will otherwise prevent waste and protect correlative rights. provided said injection wells are drilled no closer than ______ feet to the outer boundary of the aforesaid waterflood project areas nor closer than ______ feet to any quarter-quarter section or subdivision inner boundary.

IT IS THEREFORE ORDERED:

(1) That the applicant, Champlin Petroleum Company, is hereby authorized to expand its Champlin Chaveroo State 32 Waterflood

Project in the Chaveroo-San Andres Pool by the injection of water into the San Andres formation through ene-additional well located in Unit B of Section 32, Township 7 South, Range 33 East, NMPM, Roosevelt County, New Mexico.

- (2) That monthly progress reports of the expanded Champlin Chaveroo State 32 Waterflood Project shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.
- (3) That Order (2) of Commission Order No. R-3550, dated November 4, 1968, is hereby amended to read in its entirety as follows:
- "(2) That the Champlin Chaveroo Lauck Waterflood Project and the Champlin Chaveroo State 32 Waterflood Project shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations;

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

R-3550

Expand - one additional mjeet well - strict B - Lee. 3 z
Odne expansion for injection expansion

CASE 4379: Application of HAL M. STIERWALT FOR AN EXCEPTION TO ORDER NO. R-3221, EDDY COUNTY.